

What is claimed is:

1. A process for producing glass fiber comprising heating and rotating a hollow cylinder-shaped rotating member having peripheral wall provided with orifices so as to rotate molten glass in the rotating member, and  
ejecting the molten glass through orifices by centrifugal force to form glass fiber, characterized in  
ejecting molten glass through at least two types of orifices arranged alternately in a circumferential direction of the rotating member, each of said two types of orifices having different diameter, so as to form at least two types of primary streams having different length,  
introducing said primary streams into flame flow around the rotating member, said flame flow being ejected in a direction substantially parallel with a generatrix direction of an outer circumference of the peripheral wall, so as to fine said primary streams to form secondary fibers, and  
ejecting compressed fluid in a direction at an acute angle relative to the flame flow including secondary fibers, to collide the secondary fibers with the compressed fluid.
2. The process for producing glass fiber according to claim 1, wherein the compressed fluid is ejected in an angle of 15-30 degree relative to the generatrix direction of the outer circumference of the peripheral wall of the rotating member.
3. The process for producing glass fiber according to claim 1, wherein a distance between a top edge of the compressed fluid and a bottom edge of the peripheral wall of the rotating member is at least 30 mm.
4. An apparatus for producing glass fiber comprising  
a hollow cylinder-shaped rotating member having a peripheral wall alternately provided with at least two types of orifices each having different diameter in a circumferential direction of the peripheral wall,

a circular drawing burner concentrically arranged above and around the rotating member, and having an ejecting outlet opened in substantially parallel with a generatrix direction of an outer circumference of the peripheral wall, and

an ejecting nozzle around the drawing burner, said ejecting nozzle being concentrically arranged above and around the peripheral wall of the rotating member, and having an ejecting outlet opened in a direction at an acute angle relative to the generatrix direction of the outer circumference of the peripheral wall.

5. The apparatus for producing glass fiber according to claim 4, wherein at least two types of orifices each having different diameter are alternately provided in the peripheral wall in the circumferential direction of the peripheral wall, to form a latitudinal row,

a plurality of longitudinal orifice rows are provide in the peripheral wall in the generatrix direction of the outer circumference of the peripheral wall, and

the orifice in a lowerside region has a diameter smaller than that of the corresponding orifice in an upper side region.

6. The apparatus for producing glass fiber according to claim 4, wherein the peripheral wall is provided with larger orifices and smaller orifices, the larger orifices are arranged in the generatrix direction of the outer circumference to form first bands group of orifices,

the smaller orifices are arranged in the generatrix direction of the outer circumference to form second bands group of orifices, and

the first bands group of orifices and the second bands group of orifices are arranged alternately in the circumferential direction of the peripheral wall of the rotating member.

7. The apparatus for producing glass fiber according to claim 6, wherein the orifice arranged in a lowerside region has a diameter smaller than that of the orifice arranged in an upper side region in either the first bands group of orifices or the second bands group of orifices.

8. The apparatus for producing glass fiber according to any of claims 4-7,

~~a difference in the diameter between at least two types of orifices each having different diameter is in a range of from 0.02 to 0.3 mm.~~

Year	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059	2060	2061	2062	2063	2064	2065	2066	2067	2068	2069	2070	2071	2072	2073	2074	2075	2076	2077	2078	2079	2080	2081	2082	2083	2084	2085	2086	2087	2088	2089	2090	2091	2092	2093	2094	2095	2096	2097	2098	2099	2100
1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059	2060	2061	2062	2063	2064	2065	2066	2067	2068	2069	2070	2071	2072	2073	2074	2075	2076	2077	2078	2079	2080	2081	2082	2083	2084	2085	2086	2087	2088	2089	2090	2091	2092	2093	2094	2095	2096	2097	2098	2099	2100	